

Renewable Energy

Towards Green Jobs & Green Economy in Sri Lanka

By

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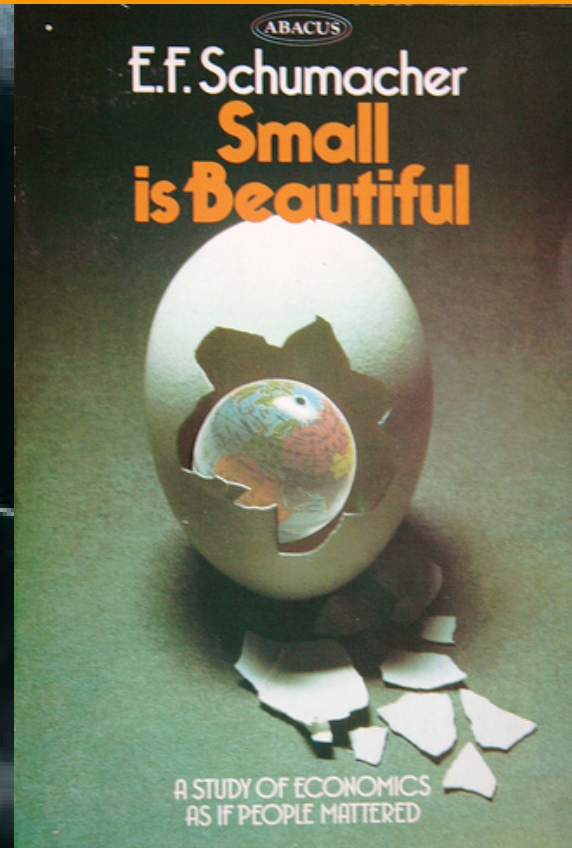


Outline

- Practical Action
- Why Renewable Energy?
- Available Renewable Energy Options in Sri Lanka
- Experiences of Practical Action in Promoting Renewable Energy options
- Scaling up of Renewable Energy
- Green Employment Opportunities

Practical Action

- Dr. E.F. Schumacher
- Appropriate Technology
- Technology for Sustainable Development
- 20 years in Sri Lanka



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Image Source: Gossip Lanka News

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Image Source: www.itn.co.uk

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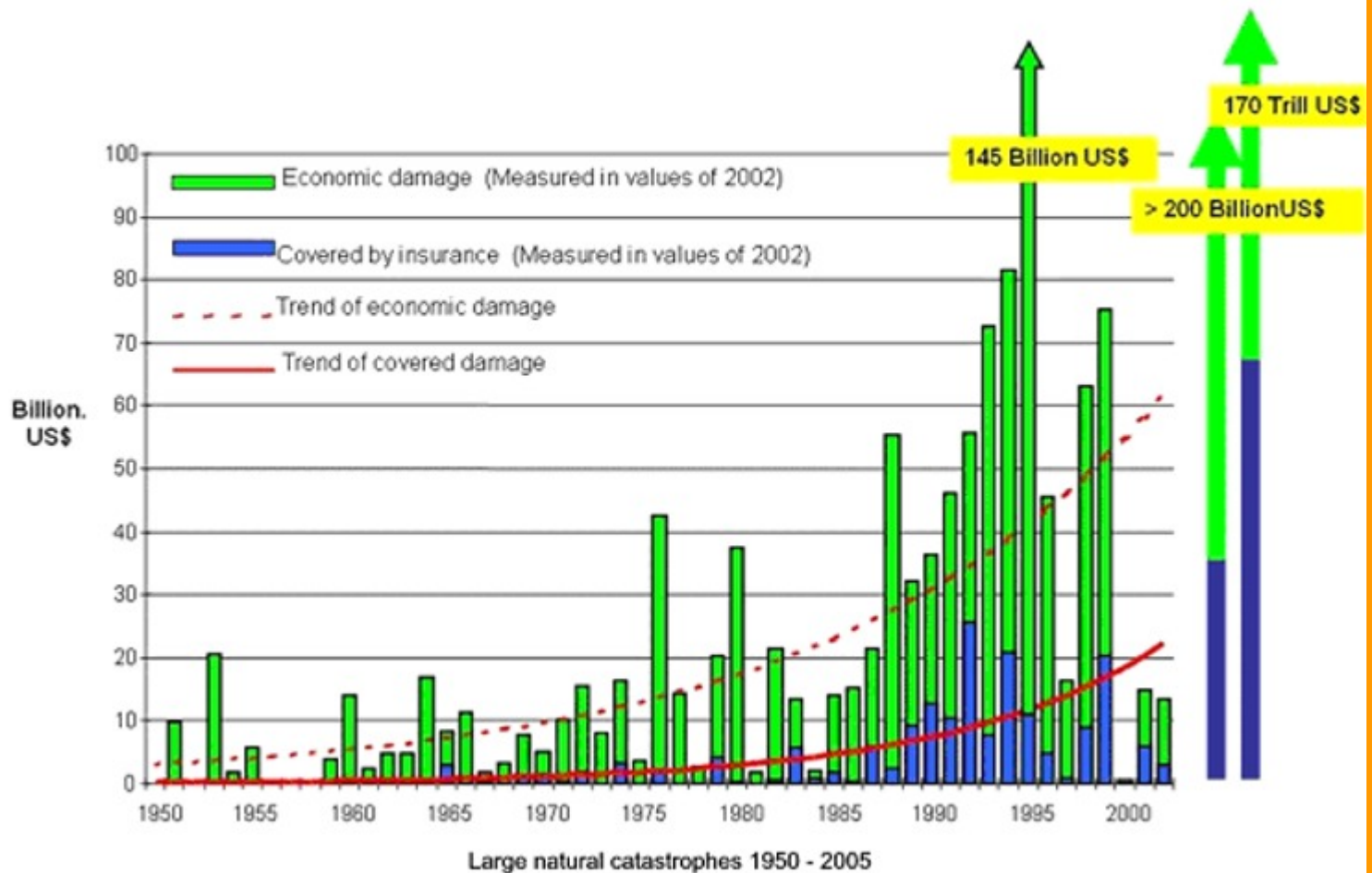
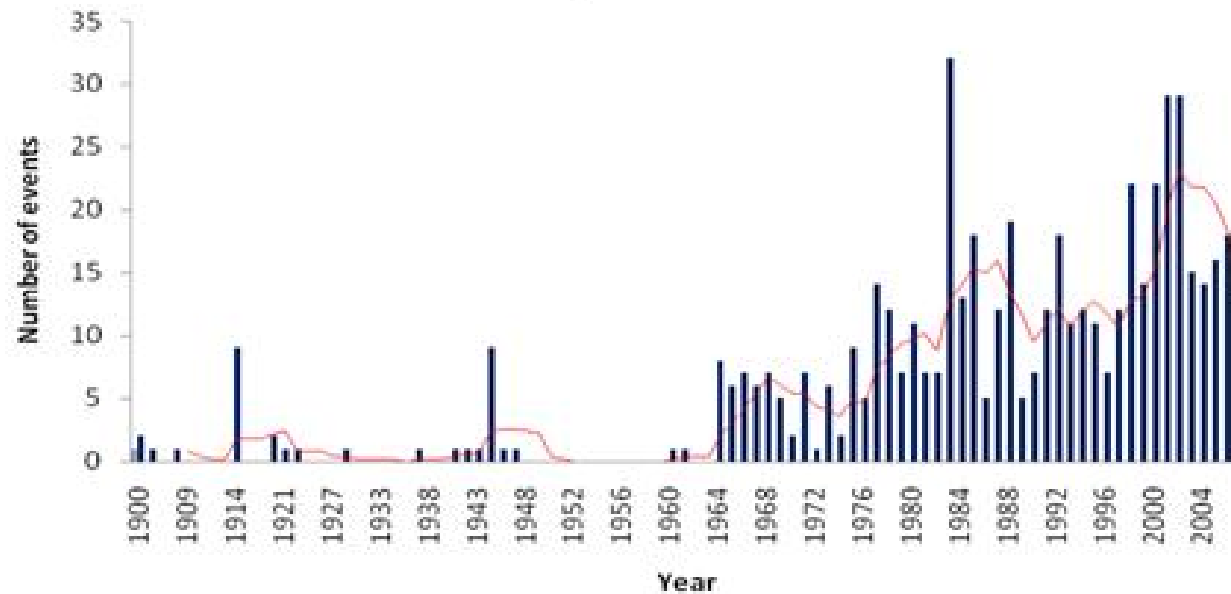


Image Source: <http://www.climatemanual.org/Cities/Chapter2/Drivers/index.htm>

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Number of Drought Events 1900-2007



Number of Flood Events 1900-2007

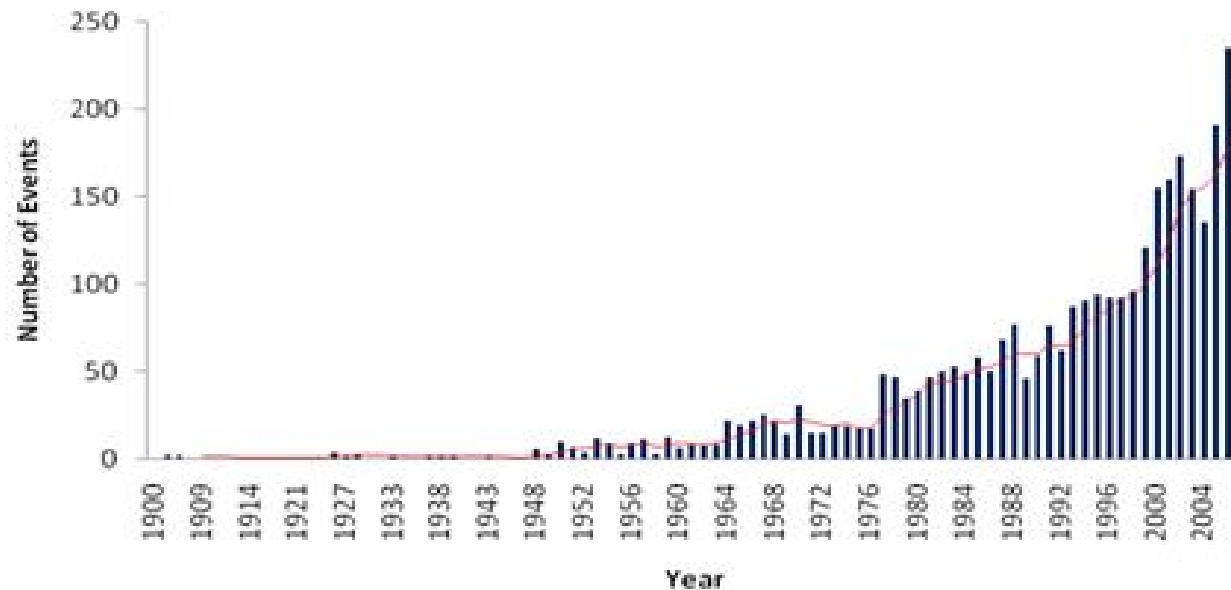


Image Source

<http://extremeweathercosts.co.uk/index.php?name=drought>

Current Global Challenge



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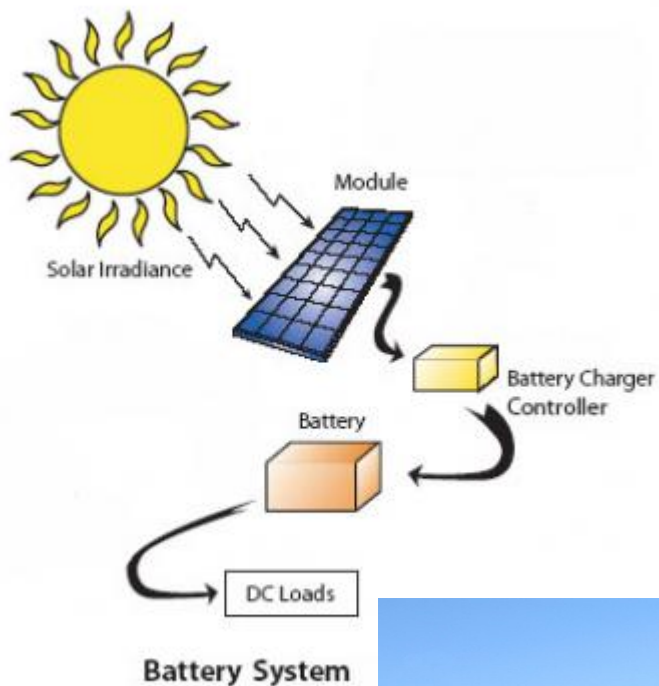
Renewable Energy

- Naturally occurring, theoretically inexhaustible source of *Energy* generated from natural resources & replaced rapidly by natural processes
 - Solar, Wind, hydro, biomass, biogas, etc

Driving Factors of Renewable Energy Demand

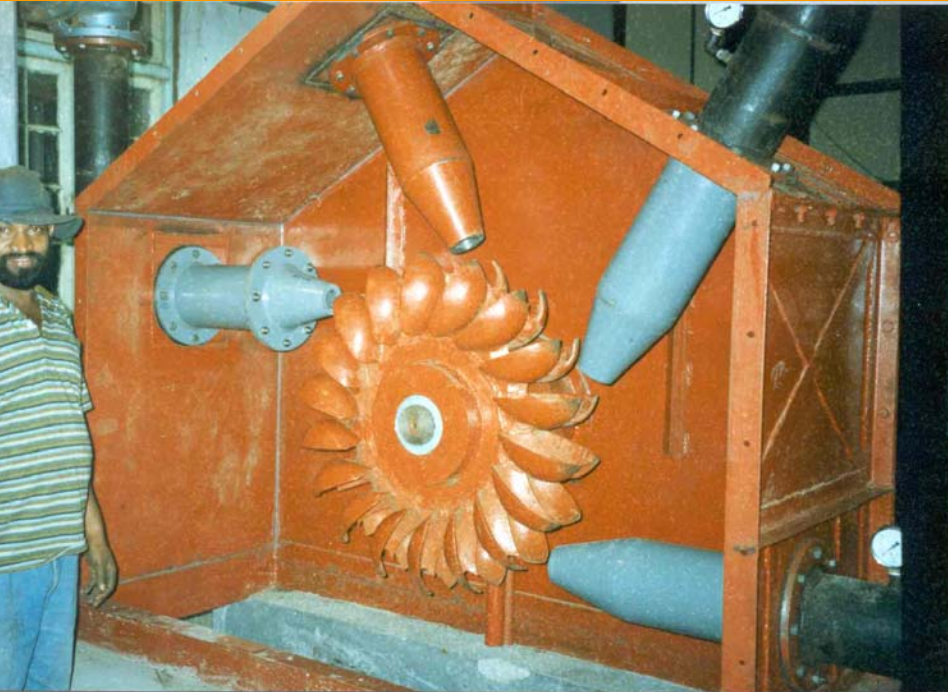
- Increasingly becoming cost effective with Increasing Fossil fuels prices (100\$ per Barrel)
- Tightening environmental regulations
- Environment related Trade Policies (Local & International)
- Individual Social Responsibilities

Solar



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Micro-Hydro & Pico Hydro



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Wind Energy



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Biogas



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Biomass



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Biodiesel???????



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ප්‍රජා ජීවි ඉන්ධන සැපයුම් මධ්‍යස්ථානය
ගුරුකොඩි, රත්නායකපුර

Community Governance Programme
Community Bio fuel processing centre
Gurugoda, Rasnayakapura

• අමුද්‍රව්‍ය කොකොඳි, වැටි එඬරු, කරඳ, දොම් සහ රබර් ආදිය (මුළුතම ආහාරයට නොගන්නා අමුද්‍රව්‍ය) • එක් වරකට නිෂ්පාදන ධාරිතාවය ලීටර් 5යි • අපේක්ෂිත ජීව ඉන්ධන භාවිතයන් අතරමැදි ප්‍රවාහන කටයුතු විදුලි උත්පාදනය, ජලය පොම්ප කිරීම • නාථයවකරුවන් ප්‍රියොක්ෂිට්‍රිය ප්‍රජා සභාව ජේරාදෙණිය, රුහුණ, මොරටුව, විශ්ව විද්‍යාල රත්නායකපුර ප්‍රා.මේ.කාර්යාලය නිකවැරේරිය ප්‍රාදේශීය සභාව NERD මධ්‍යස්ථානය	• Raw material Neem, castor, Jetropa, Karanja, Domda, Rubber etc... (Non-edible materials) • Production capacity - 5 liters per batch • Expected applications Transportation Electricity Generation Water pumping • Stakeholders Leekolapitiya Praja Sabawa Universities - Peredeniya, Moratuwa, Ruhuna NERD Centre Rasnayakapura Divisional Secretariat office Nikaweretiya Pradesiya Sabawa
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Sangrama
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PRACTICAL ACTION
PRACTICAL ACTION

අරමුදල් දායකත්වය **Funded by, APFED - UNEP, DGIS - Netherlands**

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Challenges in Renewable Energy Scaling-Up

- Technology
- Policies & Regulations
- Awareness – Esp. Cost-Benefits
- Investment / Finance
- Service Provision (Expertise)

Expertise Requirement

- Biogas – Proven Technologies are available
- Potential in Sri Lanka – Approx 2mil units (Current Approx 50,000)
- Pico-Hydro (Proven Technologies available)
- Potential in Sri Lanka – Approx 30,000 units (Current Approx 1,000)

What Expertise we need?

- Designers
- Finance Product Developers
- Fabricators
- Skilled Labourers – Construction, Maintenance, etc
- Extension Officers
- Example from Nepal on promoting biogas to cater the demand

Capacity Building of Workforce

- Formal Education – Eg: University Curricula
- Vocational Training
- Location Specific Capacity Building Programmes
- On-the job Training programmes
- Mainstreaming to large programmes – Eg: Samurdhi, “*Api Wawamu – Rata Nagamu*”

Impact on Green Economy

- Very High potential for green jobs
- Greening the value chain
- Multiplier effect of “Green Jobs”
- Decent Jobs
 - More opportunities for bottom socio-economic strata
 - Social-dialogue

Thank You!



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